pa1030: Box multiplication of linear binomials (v2)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(6x + 8)$ and $(7x + 2)$.

*	6x	8
7x	$42x^2$	56x
2	12x	16

ANSWER: $42x^2 + 68x + 16$

Question 2

Use the box method to multiply $(-6x + 2)$ and $(-5x - 9)$.

*	− 6x	2
− 5x	30x^2	− 10x
− 9	54x	− 18

ANSWER: $30x^2 + 44x - 18$

Question 3

Use the box method to multiply $(-4x - 7)$ and $(3x - 9)$.

*	− 4x	− 7
3x	− 12x^2	− 21x
− 9	36x	63

ANSWER: $-12x^2 + 15x + 63$